CALIFORNIA Water Boards

Fact Sheet

Bay Delta Plan Update

Draft San Joaquin River Flow and Southern Delta Salinity Requirements Released for Public Comment

Overview

Restoration and protection of the Delta ecosystem will depend on many factors, including actions to improve habitat, reduce predation, minimize entrainment, prevent pollution, and increase river flows. The State Water Resources Control Board (State Water Board) is updating its Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) to restore and protect the Delta ecosystem. The Delta Stewardship Council (DSC), in its draft Delta Plan, states: "minimum flows must be established for the Delta and its major tributaries as part of a comprehensive effort to address all ecosystem stressors", and directs the State Water Board to adopt and implement updated flow objectives for the Delta to achieve the coequal goals of ecosystem protection and a reliable water supply by June 2, 2014. The State Water Board's current Bay-Delta Plan update will implement this key policy of the DSC's Delta Plan.

The State Water Board periodically updates the Bay-Delta Plan to protect municipal, industrial, agricultural, and fish and wildlife beneficial uses. The plan identifies the beneficial uses of water, water quality objectives to protect the uses, and a program of implementation to achieve the objectives. The State Water Board is phasing the current update of the Bay-Delta Plan. The first phase, initiated in 2009 and the subject of this fact sheet, updates flow objectives to protect fish and wildlife in the San Joaquin River (SJR) and its salmon-bearing tributaries; and salinity objectives to protect agriculture in the southern Delta. Phase I will also establish a program of implementation for these objectives.

Phase II of the State Water Board's Bay-Delta Plan update, initiated in 2012, will address the rest of the Bay-Delta Plan, including Delta outflow and export objectives, and other measures needed to protect Delta resources. The timing of Phase II ensures that the substantial body of information on Delta outflow, exports, and habitat needs developed through the Bay-Delta Conservation Planning (BDCP) process will be fully considered in the State Water Board's Bay-Delta Plan update.

Proposal

The State Water Board is considering all factors in its authority in this Bay-Delta Plan update. It is proposing narrative flow objectives to support and maintain the natural production of viable native SJR watershed fish populations migrating through the Delta, and will recommend actions to others for non-flow measures and other factors not within its authority. This SJR flow proposal will establish February through June flow requirements of 35 percent of unimpaired flow for three salmon bearing tributaries-- the Merced, Stanislaus and Tuolumne rivers. Unimpaired flow is the flow that would occur if all runoff from the watershed remained in the river, without storage in reservoirs or diversions (such as irrigation, power generation, or water supply). Currently, median

February through June flows in the Merced, and Tuolumne rivers are less than 35% of unimpaired flow more than half of the time, so this proposal would require increased flows to meet the proposed requirement. The southern Delta salinity proposal would revise the water quality objectives for salinity to reasonably protect agricultural beneficial uses, and reflects existing conditions, which have been found to be suitable for all crops.

These proposals are being released for public comment, along with a draft Substitute Environmental Document (SED)[1] that describes the potential environmental effects of the flow and salinity alternatives that were considered. The SED evaluates the potential effects of the proposal on hydrology and water quality, flooding, sediment and erosion, aquatic resources, terrestrial and biological resources, ground water resources, recreational resources, agricultural resources, cultural resources, energy resources, and climate change.

The draft SED relies upon recent scientific studies that conclude that a higher and more variable flow regime is needed in salmon bearing tributaries to the SJR to protect fish migrating through the Delta. The draft SED also relies upon recent studies that conclude that current surface water salinity conditions in the southern Delta are suitable for irrigation of all agricultural crops. Both the scientific support documents and the modeling of water supply, economic, and hydropower effects have been the subject of numerous public workshops and scientific peer review. The approach taken in the proposal has also been reviewed by the National Research Council and the Delta Independent Science Board.

This update of the Bay-Delta Plan, describing the actions needed to protect the Bay-Delta ecosystem, **does not** affect the water rights of anyone, either within or outside of the Delta. Any changes to water rights that may be needed to implement the plan will be considered in future proceedings.

Lower San Joaquin River Flow Needs

The goal of the proposed SJR flow objectives is to protect fish and wildlife by supporting and maintaining the natural production of viable native SJR watershed fish populations migrating through the Delta. The SJR flow proposal establishes February through June flow requirements of 35 percent of unimpaired flow, not to exceed flood control levels, along with base flow requirements. Unimpaired flow is the river flow that would occur if all runoff from the watershed remained in the river, without storage or diversion. Unimpaired flow can be used to approximate flows of a more natural pattern, and as a straightforward means to assist in balancing the competing uses of water. The 35 percent unimpaired flow proposal strikes a balance between providing water for the protection of fish and other competing uses of water, including agriculture and hydropower generation. Since the SED analyzes the effects of a range of flows from 20 to 60 percent of unimpaired flow, the Board could select an alternative percent of unimpaired flow within this range. This SED could also accommodate a negotiated stakeholder agreement to provide flows within this range.

The proposal encourages adaptive management, not rigid adherence to a specific flow, in order to respond to evolving scientific information, and to allow for integration of the flow requirements with

[1]The State Water Board's water quality control planning program is a certified regulatory program, and under state law a SED may be prepared in lieu of an EIR. A SED is an informational document and does not recommend approval or denial of a project.

other regulatory processes. Water managers and State and federal fish agencies may develop proposals to maximize protection of fish and wildlife while minimizing water supply costs by releasing an alternative percentage of unimpaired flow, ranging between 25 percent and 45 percent, and/or shifting equivalent amounts of water into times that may be more beneficial to fishery resources.

Southern Delta Salinity Needs

The goal of the southern Delta objectives is to protect agriculture through a program of implementation that places responsibility on the US Bureau of Reclamation, the Department of Water Resources, and others, commensurate with their contribution to the southern Delta salinity impairments. Salinity conditions in the southern Delta are affected by various factors including low flows, salts imported to the SJR Basin in irrigation water, municipal discharges, groundwater percolation, poor circulation and water diversions and discharges from agricultural drainage. Existing objectives do not factor in precipitation which also affects salinity conditions. Peer reviewed scientific reports, released in 2012, present an approach to estimating crop yield impacts as a function of salinity. The reports concluded that current surface water salinity conditions in the southern Delta are suitable for irrigation of all agricultural crops. The objectives are being revised to reasonably protect agricultural beneficial uses, and the program of implementation is intended to either maintain, or improve upon existing conditions.

Process and Schedule

Changes to the Bay-Delta Plan must be considered and adopted by the State Water Board and approved by the Office of Administrative Law.

December 31, 2012:	Proposal released, along with a draft SED.
March 5, 2013:	Written comments on the draft revised objectives, program of implementation and draft SED are due.
March 20, 2013:	State Water Board workshop on the draft revised objectives, program of implementation and SED.
May 3, 2013:	Draft final objectives and SED released for comment.
August 6, 2013:	Consideration of adoption by State Water Board

Any future decision of the State Water Board to make changes to existing flow objectives will be informed by the effects that enhanced fishery protection flows would have on the competing uses of water. In the San Joaquin River watershed these competing uses are principally agricultural water supply and hydropower.

More Information

The Proposal and Supporting Documents:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/2012_sed/

Bay Delta Program Information:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/